

IN THE CLAIMS:

Please amend claim 33 as follows:

33. (Amended) A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film to be crystallized over a glass substrate having a glass strain point of 593°C or less, said semiconductor film having a first region and a second region;

disposing a catalyst containing material in contact with a selected region of only the first region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

heating said semiconductor film so that crystallization of said semiconductor film occurs only in the first region thereof while the semiconductor film in said second region is not crystallized, wherein said crystallization proceeds in a direction parallel to a major surface of said substrate from said selected region with diffusion of said catalyst through the semiconductor film, thereby forming crystals of said semiconductor film in said first region extending parallel with the major surface of the substrate,

wherein a concentration of said catalyst in said first region is 1×10^{19} atoms/cm³ or lower.

Please add new claims 49-66 as follows:

--49. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface of a substrate;

disposing a catalyst containing material in contact with at least one rectangular selected region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

crystallizing said semiconductor film by heating;

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patterning said semiconductor film into an active layer of at least one thin film transistor, said active layer including at least a portion of said selected portion;

forming a gate electrode adjacent to said active layer with a gate insulating film interposed therebetween; and

forming a wiring over said gate electrode and said active layer, said wiring being in contact with said selected portion of said semiconductor film.

50. A method according to claim 49 wherein said catalyst is selected from the group consisting of Ni, Fe, Co, Pd and Pt.

51. A method according to claim 49 wherein said rectangular selected region is parallel with said gate electrode.

52. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface of a substrate;

disposing a catalyst containing material in contact with at least one rectangular selected region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

crystallizing said semiconductor film by heating;

patterning said semiconductor film into an active layer of thin film transistors, said active layer including at least a portion of said selected portion;

forming gate electrodes adjacent to said active layer with a gate insulating film interposed therebetween; and

forming a wiring over said gate electrodes and said active layer, said wiring being in contact with said selected portion of said semiconductor film.

53. A method according to claim 52 wherein said catalyst is selected from the group consisting of Ni, Fe, Co, Pd and Pt.

54. A method according to claim 52 wherein said rectangular selected region is parallel with said gate electrodes.

55. A method of manufacturing a semiconductor device comprising the steps of:

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forming a semiconductor film on an insulating surface of a substrate;

disposing a catalyst containing material in contact with at least one rectangular selected region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

crystallizing said semiconductor film by heating;

patterning said semiconductor film into an active layer of a pair of N-channel and P-channel thin film transistors, said active layer including at least a portion of said selected portion;

forming two gate electrodes adjacent to said active layer with a gate insulating film interposed therebetween;

introducing N-channel and P-channel impurities into said active layer; and

forming a wiring over said gate electrodes and said active layer, said wiring being in contact with said selected portion of said semiconductor film.

56. A method according to claim 55 wherein said catalyst is selected from the group consisting of Ni, Fe, Co, Pd and Pt.

57. A method according to claim 55 wherein said rectangular selected region is parallel with said gate electrodes.

58. A method of manufacturing a semiconductor device comprising the steps of:

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forming a semiconductor film on an insulating surface of a substrate;

disposing a catalyst containing material in contact with at least one rectangular selected region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

crystallizing said semiconductor film by heating;

patterning said semiconductor film into an active layer of at least one thin film transistor, said active layer including at least a portion of said selected portion;

forming a gate insulating film on said active layer;

forming a gate electrode on said gate insulating film; and

forming a wiring over said gate electrode and said active layer, said wiring being in contact with said selected portion of said semiconductor film.

59. A method according to claim 58 wherein said catalyst is selected from the group consisting of Ni, Fe, Co, Pd and Pt.

60. A method according to claim 58 wherein said rectangular selected region is parallel with said gate electrode.

61. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface of a substrate;

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disposing a catalyst containing material in contact with at least one rectangular selected region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

crystallizing said semiconductor film by heating;

patterning said semiconductor film into an active layer of thin film transistors, said active layer including at least a portion of said selected portion;

forming a gate insulating film on said active layer;

forming at least two gate electrodes on said gate insulating film;

and

forming a wiring over said gate electrodes and said active layer, said wiring being in contact with said selected portion of said semiconductor film.

62. A method according to claim 61 wherein said catalyst is selected from the group consisting of Ni, Fe, Co, Pd and Pt.

63. A method according to claim 61 wherein said rectangular selected region is parallel with said gate electrodes.

64. A method of manufacturing a semiconductor device comprising the steps of:

forming a semiconductor film on an insulating surface of a substrate;

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disposing a catalyst containing material in contact with at least one rectangular selected region of the semiconductor film, said catalyst being capable of promoting crystallization of said semiconductor film;

crystallizing said semiconductor film by heating;

patterning said semiconductor film into an active layer of a pair of N-channel and P-channel thin film transistors, said active layer including at least a portion of said selected portion;

forming a gate insulating film on said active layer;

forming two gate electrodes on said gate insulating film;

introducing N-channel and P-channel impurities into said active

layer; and

forming a wiring over said gate electrodes and said active layer,

said wiring being in contact with said selected portion of said semiconductor film.

65. A method according to claim 64 wherein said catalyst is selected from the group consisting of Ni, Fe, Co, Pd and Pt.

66. A method according to claim 64 wherein said rectangular selected region is parallel with said gate electrodes.--

REMARKS

The Office Action of February 17, 1999 was received and carefully reviewed. Reconsideration and withdrawal of the currently pending rejections are requested for the reasons advanced in detail below.